

## REMARKS

Applicants request favorable reconsideration and allowance of the present application in view of the foregoing amendments and the following remarks.

Claims 24, 26 and 27 are pending in the present application. Claims 24 and 27 are the independent claims. Claim 25 has been cancelled without prejudice.

Claims 24 and 27 have been amended. Applicants submit that support for the amendments can be found in the original disclosure, for example, at least in Figs. 8 and 15 and the corresponding description in the specification. Therefore, no new matter has been added.

Applicants appreciate the courtesies extended by Examiner Lee in granting and conducting a personal interview with Applicants' representative. The substance of the discussion at the interview is summarized below.

Claims 24-27 stand rejected under 35.U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,650,813 (Gilblom, et al.) in view of U.S. Patent No. 5,517,419 (Lanckton, et al.) and U.S. Patent No. 5,767,845 (Fields et al.). Applicants respectfully traverse this rejection for the reasons discussed at the interview and re-presented below.

As discussed during the interview, the present invention as recited in independent Claims 24 and 27 is directed to a method and apparatus for synthesizing image data sensed by first and second image sensing means on a mobile object to make panoramic image data. A problem encountered by a conventional system mounted on a mobile object for obtaining a panoramic image is that part of the mobile object is included in the image. The present invention recited in Claims 24 and 27 addresses that problem by retrieving first and second image data respectively sensed by first and second image sensing means arranged

separately on a mobile object with a known distance  $r$  between them. In particular, Claims 24 and 27 recite the features of retrieving first image data that was sensed at a first time instant  $t_1$  and retrieving second image data that was sensed at a second time instant  $t_2$ , where the second time instant  $t_2$  is a time occurring after the first time instant  $t_1$  by a time period corresponding to the known distance  $r$  between the first image sensing means and the second image sensing means so that  $t_2 = t_1 + r/v$ , wherein the mobile object is moving with a velocity  $v$ . The retrieved image data is synthesized to make panoramic image data of a panoramic image from the location of the first image sensing means at the first time instant.

Due to the above-mentioned features of Claims 24 and 27, panoramic image data is obtained for a panoramic image from the viewpoint where the first image sensing means is at the first time instant, but the panoramic image does not include part of the mobile object. Applicants submit that the cited art fails to disclose or suggest at least these features.

As discussed at the interview, Gilblom et al. discloses that a plurality of cameras are located on a rotating vertical support, separated by predetermined angles. A panoramic image can be obtained as the cameras rotate. However, if this arrangement were placed on a mobile object, the panoramic image would include a part of the mobile object. That patent does not disclose or suggest retrieving image sensed by first and second image sensing means arranged a known distance  $r$  apart on a mobile object traveling with a velocity  $v$ . More particularly, that patent does not disclose or suggest retrieving first and second image data sensed at a first time instant  $t_1$  and a second time instant  $t_2$ , respectively, so that  $t_2 = t_1 + r/v$ .


The other cited art fails to remedy the above-mentioned deficiencies. As pointed out at the interview, Lankton et al. and Fields et al. do not even appear to disclose forming a panoramic image. Further, even if the teachings of Gilblom et al. could properly be combined with those of Lanckton et al., Applicants submit that the combination would not result in the features recited in Claims 24 and 27. Instead, Applicants submit that if the image sensing devices of Gilblom et al. were substituted for those of Lankton et al., the result would be a mobile terrain mapping vehicle with a plurality of rotating camera arrangements located at various positions on the vehicle, each of which would capture part of the vehicle in its images.

For the foregoing reasons, Applicants submit that the cited art, even if it can properly be considered in combination, fails to disclose or suggest at least the above-mentioned features of independent Claims 24 and 27. Claim 26 is patentable for at least the same reasons as Claim 25, as well as for the additional feature it recites.

In view of the foregoing, Applicants submit that this application is in condition for allowance. Favorable reconsideration, entry of this Amendment, withdrawal of the rejection set forth in the above-mentioned Office Action, and an early Notice of Allowance are requested.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should be directed to our below-listed address.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'B. L. Klock', written over a horizontal line.

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